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12. Performing Organization Name and Address NDDOT M+R <input checked="" type="checkbox"/> North Dakota DOT NDDOT OTHER* <input type="checkbox"/> Materials and Research Division NDSU <input type="checkbox"/> 300 Airport Road UND <input type="checkbox"/> Bismarck ND 58504-6005 UGPTI <input type="checkbox"/> OTHER* <input type="checkbox"/> *see supplementary notes		13. Sponsoring Agency Name and Address North Dakota DOT Materials and Research Division 300 Airport Road Bismarck ND 58504-6005	
14. Supplementary Notes			
15. Abstract <u>Purpose and Need</u> Currently, new construction of PCC pavements incorporates the use of an underlying permeable base course equipped with edge drains. The purpose of the permeable base course and edge drains is to intercept and drain unwanted moisture that has entered the base through the pavement surface. If the surface moisture has an immediate outlet there should be no need to seal the joints. Sealing joints has not been a cost effective measure for NDDOT because the sealants have been proven to fail shortly after construction. Substantial savings can be incurred by eliminating the sealant and the sawing processes that go with sealing. <u>Objective</u> The objective of this study is to determine if joint sealants are necessary for the performance and longevity of the pavement structure. <u>Scope</u> Since 1997 the North Dakota Department of Transportation (NDDOT) has included unsealed joint test sections on several new PCC paving projects. NDDOT will evaluate the unsealed joint test sections for approximately 10 years. Items that will be monitored and evaluated are: Distress at the joints, ride, and the amount of non-compressible material in the joints, if the incompressible material is being filtered through the joint into the drainage system. <u>Summary</u> At this point in the evaluation, the distresses occurring in the unsealed joint section are also occurring in joints that are sealed. Every test section shows a higher number of spalled joints versus the control section. Within the past two years, all sections (sealed and unsealed) increased in the number of transverse spalls significantly except for one control section. The severity of spalls are more severe in the unsealed joint sections. The ride quality at this time appears to be unaffected. The drainage system does not seem to be affected.			
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